

Request — Paul Schuleritz

Access DB# 144929

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Sabcha Oz Examiner #: 74141 Date: 2/10/03
Art Unit: 1616 Phone Number: 20622 Serial Number: 10/501,816
Mail Box and Bldg/Room Location: _____ Results Format Preferred (circle): PAPER DISK E-MAIL

4070 Rem 4A45

If more than one search is submitted, please prioritize searches in order of need.

MEJ

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Brocidal Compds and their preparations

Inventors (please provide full names):

Jill Patricia Benner et al

Earliest Priority Filing Date: 1/18/02 371 of Pct/67603/00063
For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number. Chs 1-13, 15+16

Please search for the compounds of
formula (I), (II) & (III).

Process for the Production (Ch 9-11)

Ch 12
=

Please see attached sheets

Thank you

STAFF USE ONLY

Type of Search

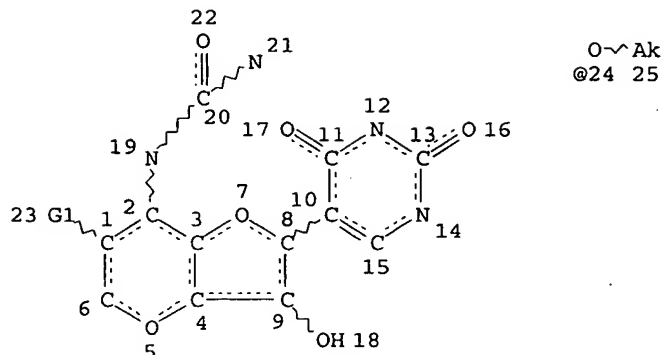
Vendors and cost where applicable

Searcher: _____	NA Sequence (#) _____	STN <u>213.02</u>
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) <u>041</u>	Questel/Orbit _____
Date Searched: _____	Bibliographic _____	Dr.Link _____
Date Compiled: <u>2/14</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep. Review Time <u>10</u>	Fulltext _____	Sequence Systems _____
Clerical Prep. Time: _____	Patent Family _____	WWW/Internet _____
Online Time <u>10</u>	Other _____	Other (specify) _____

=> d que

L1

STR



VAR G1=OH/24

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 25

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 25

STEREO ATTRIBUTES: NONE

L3 5 SEA FILE=REGISTRY SSS FUL L1

L4 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L3

=> d l4 ibib abs hitstr 1-6

L4 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:675751 HCAPLUS

DOCUMENT NUMBER: 141:190996

TITLE: Process to prepare malayamycin A derivatives as antifungal agents

INVENTOR(S): Hanessian, Stephen; Machaalani, Roger; Marcotte, Stephane Michael Jean

PATENT ASSIGNEE(S): Syngenta Limited, UK

SOURCE: PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004069842	A1	20040819	WO 2004-GB359	20040128
W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG, BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR, CU, CU, CZ, CZ, DE, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES, ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN, IS, JP, JP, KE, KE, KG, KG, KP, KP, KR, KR, KZ, KZ, KZ, LC, LK, LR, LS, LS, LT, LU, LV, MA, MD, MD, MG, MK, MN, MW, MX, MX, MZ, MZ, NA, NI				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BF, BJ, CF, CG, CI, CM, GA, GN,				

GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

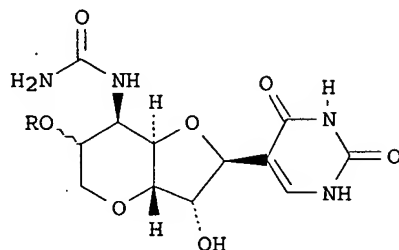
GB 2003-2648

A 20030205

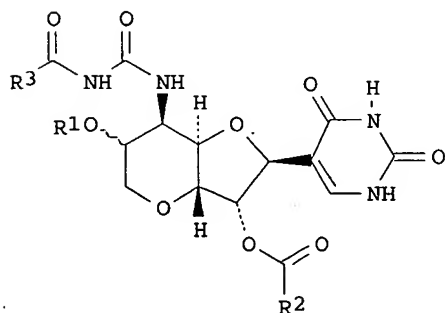
OTHER SOURCE(S):

MARPAT 141:190996

GI



I



II

AB A process is provided for the preparation of a compound of the general formula I: wherein R is H or C1-4 alkyl, which comprises treating a compound of the general formula II: where R1 is R or R2CO, R2 is C1-8 alkyl or optionally substituted Ph and R3 is optionally substituted C1-8 alkyl or optionally substituted aryl, with an amine R4NH2 wherein R4 is H or C1-4 alkyl. Also provided are the trans isomers of the compound I where R is CH3 (6-epi-malayamycin A) and H (6-epi-desmethylmalayamycin A), the cis and trans isomers of the compound I where R is C2-4alkyl and various intermediate compds. Thus, malayamycin A (cis-I, R = H) was prepared from D-(+)-ribonolactone via coupling with 2,4-dimethoxy-5-iodopyrimidine and cyclization reactions. The compds. were tested against a variety of foliar fungal diseases of plants. These tests were carried out against *Stagonospora nodorum* (LEPTNO), *Blumeria graminis tritici* (ERYSGT), and *Puccinia tritici* (PUCCRT) on wheat.

IT 569360-94-7P 736993-22-9P

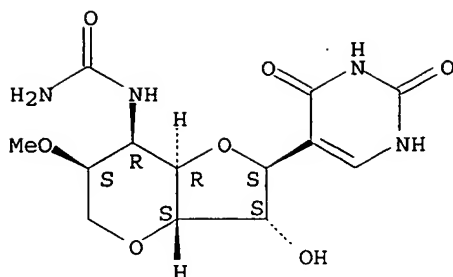
RL: AGR (Agricultural use); BSU (Biological study, unclassified); IMF (Industrial manufacture); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(process to prepare antifungal malayamycin A derivs. from D-(+)-ribonolactone via coupling with 2,4-dimethoxy-5-iodopyrimidine and cyclization reactions)

RN 569360-94-7 HCAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 5-[5-[(aminocarbonyl)amino]-3,7-anhydro-5-deoxy-6-O-methyl-D-glycero-β-D-allo-heptofuranosyl]- (9CI) (CA INDEX NAME)

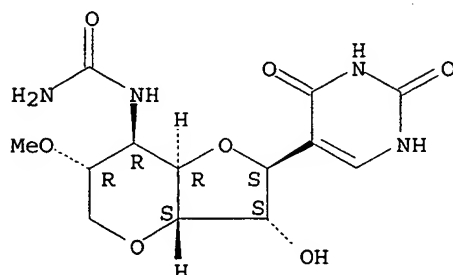
Absolute stereochemistry. Rotation (+).



RN 736993-22-9 HCAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 5-[5-[(aminocarbonyl)amino]-3,7-anhydro-5-deoxy-6-O-methyl-L-glycero-β-D-allo-heptofuranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry: Rotation (+).



L4 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:805261 HCAPLUS

DOCUMENT NUMBER: 140:28013

TITLE: Total Synthesis and Structural Confirmation of Malayamycin A: A Novel Bicyclic C-Nucleoside from Streptomyces malaysiensis

AUTHOR(S): Hanessian, Stephen; Marcotte, Stephane; Machaalani, Roger; Huang, Guobin

CORPORATE SOURCE: Department of Chemistry, Universite de Montreal, Montreal, QC, H3C 3J7, Can.

SOURCE: Organic Letters (2003), 5(23), 4277-4280

CODEN: ORLEF7; ISSN: 1523-7060

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 140:28013

AB The stereocontrolled synthesis of malayamycin A, a novel naturally occurring bicyclic C-nucleoside of the perhydrofuropyran type, is described.

IT 569360-94-7P, Malayamycin A

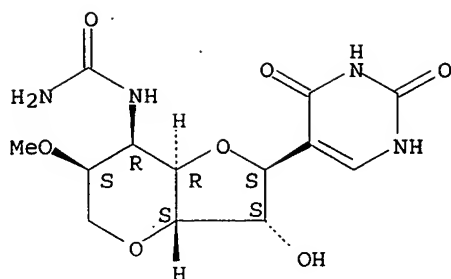
RL: SPN (Synthetic preparation); PREP (Preparation)

(stereocontrolled synthesis of malayamycin A, a member of naturally occurring bicyclic perhydrofuropyran C-nucleosides from Streptomyces malaysiensis)

RN 569360-94-7 HCAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 5-[5-[(aminocarbonyl)amino]-3,7-anhydro-5-deoxy-6-O-methyl-D-glycero-β-D-allo-heptofuranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:591185 HCAPLUS

DOCUMENT NUMBER: 139:132519

TITLE: Antifungal compounds produced by *Streptomyces malaysiensis*

INVENTOR(S): Benner, Jill Patricia; Boehlendorf, Bettina Gertrud Henriette; Kipps, Martin Richard; Lambert, Nicolas Eugene Paul; Luck, Riet; Molleyres, Louis-pierre; Neff, Snezana; Schuez, Traugott Christoph; Stanley, Paul David

PATENT ASSIGNEE(S): Syngenta Limited, UK; Syngenta Crop Protection, Inc.

SOURCE: PCT Int. Appl., 33 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

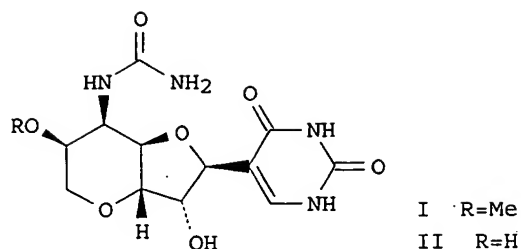
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003062242	A1	20030731	WO 2003-GB63	20030110
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1465898	A1	20041013	EP 2003-700849	20030110
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
BR 2003006944	A	20041214	BR 2003-6944	20030110
PRIORITY APPLN. INFO.:			GB 2002-1160	A 20020118
			WO 2003-GB63	W 20030110

GI



AB The invention provides two compds. that are of particular interest: malayamycin A (I) and desmethylmalayamycin A (II). These compds., which may be prepared by growing under controlled conditions a previously unknown strain of micro-organism from the species *Streptomyces malaysiensis*, were characterized by NMR and mass spectroscopic data. They have biocidal activity, including anti-fungal, anti-viral and anti-cancer activity, and are of special interest for use in agriculture, horticulture, animal and human health.

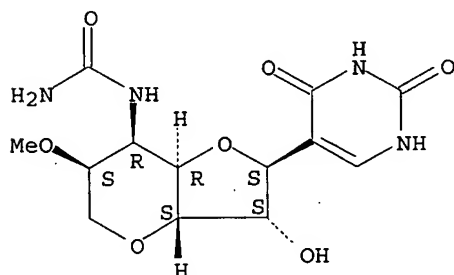
IT 569360-94-7P, Malayamycin A 569360-95-8P, Desmethylmalayamycin A

RL: BMF (Bioindustrial manufacture); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation)
(antifungal compds. produced by *Streptomyces malaysiensis*)

RN 569360-94-7 HCAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 5-[5-[(aminocarbonyl)amino]-3,7-anhydro-5-deoxy-6-O-methyl-D-glycero-β-D-allo-heptofuranosyl]- (9CI) (CA INDEX NAME)

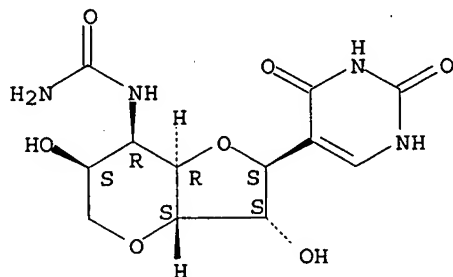
Absolute stereochemistry. Rotation (+).



RN 569360-95-8 HCAPLUS

CN 2,4(1H,3H)-Pyrimidinedione, 5-[5-[(aminocarbonyl)amino]-3,7-anhydro-5-deoxy-D-glycero-β-D-allo-heptofuranosyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1979:23481 HCAPLUS

DOCUMENT NUMBER: 90:23481

TITLE: Studies on ezomycins, antifungal antibiotics. XI.
Application of carbon-13 NMR spectroscopy to the
structural investigation of ezomycins

AUTHOR(S): Sakata, Kanzo; Uzawa, Jun; Sakurai, Akira

CORPORATE SOURCE: Inst. Phys. Chem. Res., Saitama, Japan

SOURCE: Organic Magnetic Resonance (1977), 10, 230-4

CODEN: ORMRBD; ISSN: 0030-4921

DOCUMENT TYPE: Journal

LANGUAGE: English

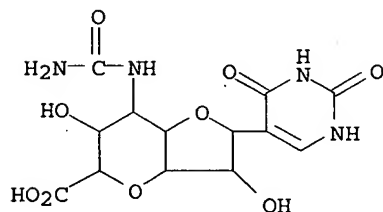
AB The structures of ezomycins A1, A2, B1, B2, C1, C2, D1, and D2 were confirmed by studying their natural abundance ^{13}C NMR spectra using gated proton decoupling, long range selective proton decoupling, and selective proton decoupling methods. The $J(\text{CH})$ value of the anomeric C signal supports the β -configuration.

IT 57973-10-1 57973-12-3

RL: PRP (Properties)
(carbon-13 NMR of)

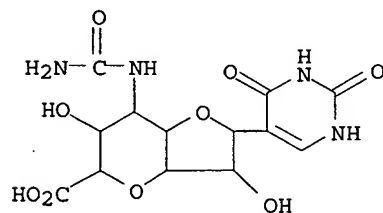
RN 57973-10-1 HCAPLUS

CN D-threo- β -D-allo-Octofuranuronic acid, 5-[(aminocarbonyl)amino]-3,7-anhydro-1,5-dideoxy-1-(1,2,3,4-tetrahydro-2,4-dioxo-5-pyrimidinyl)- (9CI)
(CA INDEX NAME)



RN 57973-12-3 HCAPLUS

CN D-threo- α -D-allo-Octofuranuronic acid, 5-[(aminocarbonyl)amino]-3,7-anhydro-1,5-dideoxy-1-(1,2,3,4-tetrahydro-2,4-dioxo-5-pyrimidinyl)- (9CI)
(CA INDEX NAME)



L4 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1977:423659 HCAPLUS

DOCUMENT NUMBER: 87:23659

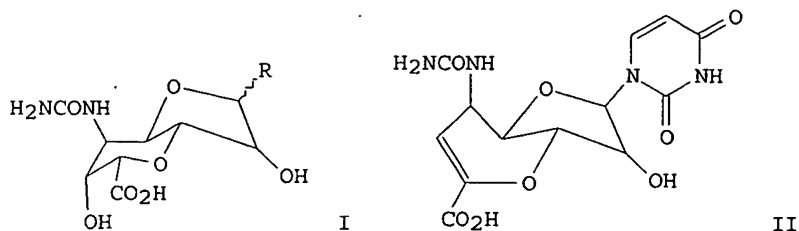
TITLE: Studies on ezomycins, antifungal antibiotics. Part VIII: Application of carbon-13 NMR spectrometry to the structural investigation of the novel bicyclic anhydrooctose uronic acid nucleosides, constituents of ezomycins

AUTHOR(S): Sakata, Kanzo; Uzawa, Jun

CORPORATE SOURCE:
SOURCE:

Inst. Phys. Chem. Res., Wako, Japan
Agricultural and Biological Chemistry (1977), 41(2),
413-15
CODEN: ABCHA6; ISSN: 0002-1369
Journal
English

DOCUMENT TYPE:
LANGUAGE:
GI

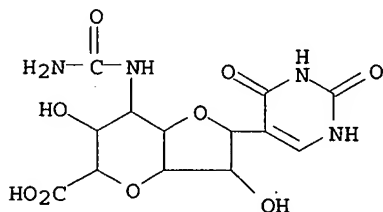


AB The structures of the title nucleosides I (R = β -1-cytosine, β -5-uracil, α -5-uracil) and II, obtained by degradation of ezomycins A1 or A2, B1 or B2, C1 or C2, and A1, resp., were determined by C-13 NMR spectroscopy.

IT 57973-10-1 57973-12-3
RL: PRP (Properties)
(carbon-13 NMR of, structure in relation to)

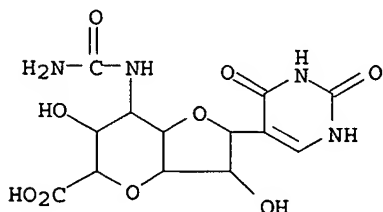
RN 57973-10-1 HCAPLUS

CN D-threo- β -D-allo-Octofuranuronic acid, 5-[(aminocarbonyl)amino]-3,7-anhydro-1,5-dideoxy-1-(1,2,3,4-tetrahydro-2,4-dioxo-5-pyrimidinyl)- (9CI)
(CA INDEX NAME)



RN 57973-12-3 HCAPLUS

CN D-threo- α -D-allo-Octofuranuronic acid, 5-[(aminocarbonyl)amino]-3,7-anhydro-1,5-dideoxy-1-(1,2,3,4-tetrahydro-2,4-dioxo-5-pyrimidinyl)- (9CI)
(CA INDEX NAME)



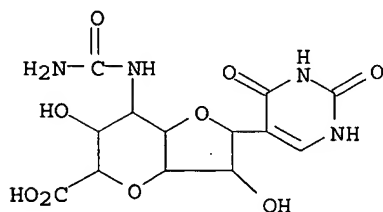
L4 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1976:4395 HCAPLUS

DOCUMENT NUMBER: 84:4395

TITLE: Ezomycins, antifungal antibiotics. VI. Structures of

ezomycins B1, B2, C1, C2, D1, and D2
 AUTHOR(S): Sakata, Kanzo; Sakurai, Akira; Tamura, Saburo
 CORPORATE SOURCE: Inst. Phys. Chem. Res., Wako, Japan
 SOURCE: Tetrahedron Letters (1975), (37), 3191-4
 CODEN: TELEAY; ISSN: 0040-4039
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI For diagram(s), see printed CA Issue.
 AB The structures of ezomycins B1 (I), B2 (II), C1 (III), C2 (IV), D1 (V),
 and D2 (VI), isolated from Streptomyces, were determined from chemical degradation
 IT 57973-10-1P 57973-12-3P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation of)
 RN 57973-10-1 HCAPLUS
 CN D-threo- β -D-allo-Octofuranuronic acid, 5-[(aminocarbonyl)amino]-3,7-
 anhydro-1,5-dideoxy-1-(1,2,3,4-tetrahydro-2,4-dioxo-5-pyrimidinyl)- (9CI)
 (CA INDEX NAME)



RN 57973-12-3 HCAPLUS
 CN D-threo- α -D-allo-Octofuranuronic acid, 5-[(aminocarbonyl)amino]-3,7-
 anhydro-1,5-dideoxy-1-(1,2,3,4-tetrahydro-2,4-dioxo-5-pyrimidinyl)- (9CI)
 (CA INDEX NAME)

